

## ABSTRACT OF THE DISCLOSURE

A creep-resistant and chemical-resistant ceramic refractory composition includes a mixed oxide of the general formula  $R_3Al_5O_{12}$  where R is at least one of Dy, Ho, Y, Er, Tm, Yb, and Lu, the mixed oxide having a garnet structure and comprising in solid solution at least one dopant of a transition metal element and a rare-earth element, which effects in the composition enhanced optical emission in at least one spectral range.

1. A creep-resistant and chemical-resistant ceramic refractory composition comprising a mixed oxide of the general formula  $R_3Al_5O_{12}$  where R is at least one of Dy, Ho, Y, Er, Tm, Yb, and Lu, the mixed oxide having a garnet structure and comprising in solid solution at least one dopant of a transition metal element and a rare-earth element, which effects in the composition enhanced optical emission in at least one spectral range.